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Inquiry, Curriculum, and Standards:
A Conversation with Kathy Short

Interview by Yvonne Siu-Runyan

Kathy Short, Professor at The University of Arizona, has taught at both the elementary and the college levels for 25 years. She earned her doctorate from Indiana University and also did postdoctoral work at Ohio State University with Dr. Charlotte Huck.

A prolific writer who has published widely, Dr. Short has co-authored **Creating Classrooms for Authors and Inquirers** *with Jerry Harste,* **Creating Curriculum** *with Carolyn Burke, which is her favorite book, and* **Learning Together Through Inquiry** *with five classroom teachers.*

In this interview, Dr. Short discusses her views on learning and inquiry, which she believes should drive the curriculum framework and student learning.

CC: Many educators are thinking of curricular issues. Specifically, they are thinking about what should be in the curriculum, what should the standards be, and how to assess or evaluate what students learn? So, my first question is broad, but one that needs to be addressed. I'm interested in what you think "Curriculum" is?

Curriculum Is Putting Beliefs into Practice - A Challenge for Educators

KS: Curriculum to me is putting beliefs into practice. And so curriculum is the bridge between the specific engagements in our classroom and our set of beliefs. All of us operate on beliefs even if we can't state them. We've all got practices that we've collected here and there, some of them we've developed ourselves. The issue with regards to Curriculum is how do those beliefs become some kind of coherent program in the classroom. Curriculum is the organizational structure, the framework that allows us to put our beliefs into practice in the classroom.

The most common kind of curriculum is based on scope and sequence charts and is very hierarchical. A lot of people have tried to move away from that, but what they have tended to move into are grab bag curricula where there is really little organizational structure. They collect great ideas from everywhere, and reach in and do a couple of activities in their classrooms each day. But what is missing is a sense of how those activities all connect together.

And so developing a sense of curriculum and developing a framework that makes sense is probably one of the greatest challenges facing teachers. And yet, curricular framework is what really allows one to be a professional decision-maker, because unless a teacher has an understanding of that framework, it's hard to make instructional decisions even though one may have beliefs and is knowledgeable about good practices.

CC: You use the word "framework." Would you define framework for our readers so that it is more concrete?

Frameworks Vary and Indicate Philosophy

KS: An example of framework that we are all familiar with are the scope and sequence charts. That framework is very linear and sequential.

Another example of a framework is the Authoring Cycle. The Authoring Cycle is a framework that has been very rich for me because that framework is grounded in the learning process itself and how we operate as learners.

So framework is something that is based on our beliefs, and it visually shows how those beliefs connect together and what kinds of engagements will support that belief and part of the framework. The framework helps teachers plan so that engagements connect to each other and to a broader theory.

Specifically, a framework is something that we can use to frame inquiry in a classroom and to make instructional decisions.

CC: So how do inquiry and curriculum fit together?

Inquiry As Curriculum

KS: Inquiry means immersing ourselves in life and living our lives as problem-posers and problem-solvers to its fullest. Thus, I believe that inquiry should be part of any curriculum. For example, there are certain things that catch our attention - either because of something that interests us or something that causes us tension or confusion. And because of this tension or confusion, we find some significant questions we really want to pursue or look at more in-depth. Through this inquiry, we develop new understandings and more questions. Inquiry then doesn't end, because we always know that while we may be currently satisfied new questions will come up. We also have to consider the impact that the information will make in our lives. Specifically we must think about what actions we want to take because of these understandings that we have developed. That action often leads us into new questions.

So for me inquiry means integrating the subject areas but not forcing the integration. That is working in the various curricular areas only if the inquiry is furthered.

CC: Right, because if you force curriculum integration, all of a sudden we are not promoting inquiry, but just doing silly things. For example, instead of using mathematics to further our understanding of bears, we merely ask kids to use bear toys to learn how to count. One can do this, of course, but it doesn't promote better understanding of bears.

KS: Right and we are going to do the same kinds of silly things in reading and writing and science.

CC: How does asking questions about a topic fit in with doing inquiry?

KS: I propose that the questions are not what one starts with.

CC: Are you proposing, as do other educators, that the inquiry starts with the exploration of the topic first?

Inquiry Starts with EXPLORATION

KS: Yes, inquiry starts with exploration so that you know something about the topic first in order to ask meaningful questions. We cannot ask meaningful questions unless we know something or have some kind of background knowledge about the topic. Frank Smith says you can't think critically about something you don't know very much about.

Inquiry begins with some kind of focus or topic. That topic might come from the school's curriculum or it might come from the kids or it might come from the teacher or it might even come from some kind of negotiation.

So you've got a topic, then you start out by totally immersing yourself in that topic. For example, all the things that I used to do in a thematic unit, I now "frontload". So that all activities, all the books, everything gets put out in a classroom all at the same time. This means that the materials a teacher might want to use in a unit will be in the classroom for children to explore right from the beginning of the inquiry. Exploration of the materials and carefully chosen teacher demonstrations and read-alouds then build student background knowledge - students explore and dialogue about the area in order to explore what might be interesting to ask and study. The questions, emerge from the initial exploration and immersion into the topic. In a theme unit, the focus is on what to teach about the topic. In inquiry, the focus is on exploring the topic from as many perspectives as possible before finding questions or issues for in-depth investigation.

I am concerned that too frequently research is simply a collection of isolated facts. I think that we went from a textbook approach where kids memorized isolated facts, to a unit approach where kids have

collected isolated facts, and where did we really get? Just a compendium of isolated facts with little understanding of concepts of the "big picture".

Students may have been studying something that was more interesting to them, but this study didn't really change the nature of what they were learning. When truly doing inquiry during exploration time, students gather a lot of facts, which lead them into asking important questions. They don't just collect facts, but use them to ask bigger questions and to construct broader understandings.

CC: Yes, and seeing bigger connections as well. How does literacy fit all that?

KS: I think that literacy is one of the tools for constructing one's understanding of the world, others, and ourselves, When I think about literacy I'm not just talking about reading and writing. But instead include art, music, movement, mathematics, drama and so on. These are all tools that kids need in order to find out about the topic. Besides using these broadly defined literacies to inquire, they are also using them to communicate and to record for themselves as well as to put together a presentation to share what they've learned with others.

One of the things that I think has been a problem is that often literacies have been thought about as merely a way to communicate what one has learned to someone else. I'm saying that all the literacies are used in doing research in order to learn.

What I mean by that is that if kids are researching the topic they are not just reading books. They are talking to people, they are looking at art, they are listening to music, they are looking at drama performances or plays or dances that relate to the topic. They are also sketching as a way to record. They are doing all of that as part of their research process. Then they also use these tools as they communicate. So in doing inquiry all the processes and tools for learning and communicating are woven throughout the study.

This is important because knowledge systems or the disciplines are used by learners in different ways when doing inquiry. Literacy tools broadly defined are for making and sharing meaning. The knowledge systems, such as science, history, psychology and so on, are stances that learners can take on from the perspectives of various disciplines which allows them to ask different questions and see things from these perspectives about the topic they are exploring.

For example, if I were a historian I would ask a different question about a particular topic than if I'm looking at it from the perspective of business, biology, philosophy, science, history and so on. Looking at a topic of study from different perspectives allows students to think and explore in different ways. They ask different questions and use different research tools and techniques.

CC: Now, to approach learning with inquiry requires teachers to be able to let go and trust, and encourage, and to take on a different kind of role in that classroom setting. Is that true?

Doing Inquiry Means Taking a Different Stance As Teacher

KS: Yes that is true. When I did theme units as a classroom teacher, I used to find all the activities, all the books, all the resources, and the questions. Everything came from me and after a while that became really old. It was a problem for me as it is for many teachers today. No wonder teachers ended up wanting to box those units and use them over and over again each year - it is so exhausting to do them.

The other major problem with this approach is that the children are limited by what the teacher knows. And this means that the children can't go any farther than the limitations of the teacher's knowledge.

Now in doing inquiry, teachers are sharing the responsibility of learning with the students. It's not that the kids construct knowledge totally by themselves, it's not that the teacher doesn't have a role. Teachers are there pushing all the time, and bringing in perspectives that students are not considering. But learning this way becomes a shared responsibility and the students are never limited by what the teacher knows.

When doing inquiry in this way, teachers have a very important role in terms of setting up structures that support inquiry. It is not laissez-faire, it's not just turning kids loose and tell them to do whatever they want to do. If we really want to work with inquiry, teachers need to have some very careful structures in place to support kids in going about inquiry. Also, teachers offer perspectives that kids aren't considering: that is, teachers need to find out what the students' perspectives are as they are inquiring and consider what they aren't posing and bring those ideas forward. It's not that teachers are trying to force the kids to take on a

certain perspective, but rather to be aware of those perspectives, and out of conscious consideration the students construct a broader and bigger understanding. This kind of curriculum takes a lot of thinking and work on the part of the teachers.

CC: Now doesn't this also mean that teachers also really need to be aware of what the kids are doing and what might they need assistance with.

Kid- Watching and Continuous Evaluation-Necessary Components in Inquiry

KS: Right, it involves a great deal of kid-watching and continuous evaluation, not just testing. In fact, what I would argue is that inquiry does not start with teaching kids something. An inquiry starts by setting up engagements that allow kids to story about their experiences related to that topic. Teachers need to create as many engagements as possible that encourage students to story - to talk about what they already know, and think about that particular topic. During this time, a teacher's role is twofold - one is to set up the engagements and the other one is to listen. It is not to teach, because at this point what a teacher wants to know is what is it that the children already know about the topic and what they are thinking.

An engagement strategy a teacher could use is; "Save the last word for me." For example, I was working with a group of fifth graders who were starting a unit on prejudice. Prejudice is a huge topic, and if you just say to kids, "What do you know about prejudice?", you will typically get a superficial response. In order to encourage their storying to get deeper into the topic, one of the things we did was to ask the kids to bring in an artifact, some kind of object from their home that to them meant "prejudice." The students brought in newspaper articles, dolls, toys, hats, a plaque. What they did was hold the object up and every one else talked about what they thought the object reflected in terms of prejudice, that is how they thought that artifact represented prejudice. Then the child who brought it got the "last word." During the discussion, the teacher and I were writing down everything the kids were saying and putting it on charts, and that's where we started.

Then as the classroom teacher and I looked at the chart, one of the things we saw with regards to prejudice was that students saw it as an issue of black and white racial tension. They didn't see prejudice in any broader way than that; they were reducing prejudice to tension between two racial groups. So one of the roles that we created as teachers was introducing other perspectives of prejudice through the literature that we read aloud and other engagements that we planned. Kids began to think about prejudice in a much bigger way and they didn't reduce and dismiss the concept of "prejudice" as only a black and white tension. And through seeing prejudice more broadly, they better understood what black and white racial tension is al1 about.

CC: Yes. They needed that bigger perspective to understand that smaller perspective, that more narrow perspective.

KS: And then out of that, unbelievable inquiry questions developed - some dealt with race, some dealt with gender - but their questions were so much more powerful and their understandings were so much more powerful.

So we started out by listening to them, and then moved into looking at the many different perspectives of prejudice so that they look at this concept more broadly. Then from this discussion or engagement the kids began to focus in on their questions and move into doing in-depth inquiry investigations.

In Order to Ask Good Questions, One Must Have Background Knowledge

CC: Okay, now when the kids are at a point where they can begin to ask good questions, because now they have some background knowledge to ask those questions, are the questions personal ones? That is, do they share their questions with one another, do kids work in groups together to ask their questions, how are these questions dealt with, and who does the asking? When the kids do the asking, are they all individual questions, or are the questions group ones? What is the structure for that?

KS: Some are individual questions. But in most cases we found that the small group context is more supportive because the kids have each other to draw from and to think with. So general1y what we do is to have the kids collect their questions - their "I wonders" - as we are going through this process. For all of that time we are *all* collecting questions - the kids and the teachers. We organize the questions in big charts on the wall. Then at the point where it becomes obvious that their questions are starting to focus, we pull out the significant ones and categorize them. Then we group the questions together - which questions are related to each other - and once we have some groupings of questions, then that's when we form inquiry groups.

The children decide on which group of questions they were most interested in, and this forms the inquiry groups. The power of a group is that you have other people to think with and support and push you in your thinking. From a teacher's standpoint managerially it is more manageable; you don't have 30 different projects going on, 30 different questions. Instead, you have a few groups, depending on the size of your classroom.

The first thing that we ask the kids to do in their groups when they have identified their set of questions is to really talk about the questions in order to make sure that as a group the questions are really what they want to address. After that, we ask them to think through a plan. We asked them to think about the following:

1. If this is what you want to know, then what is it that you have to do?

2. List the things that you are going to need to do to explore your questions. What kinds of materials are you going to need? Are these materials things that you can get? Are they things that the teacher is going to have to help you to get?

Part of this process is that the kids are going to share in the responsibility of the inquiry.

One of the advantages of what we did in the beginning of the inquiry study is to pull out everything that we have on that topic. So the materials used for exploration become a portion of the materials needed for the inquiry. The browsing allows them to identify what is already in the room, what they can pull from.

One of the limitations of bringing out materials at the point that teachers think the students need them instead of right at the beginning for exploration is that the students have browsed and so now they know where to go to find sources for their inquiry; it is not all new to them. Instead of parceling materials out to students, when teachers frontload all the materials, it provides background information for asking important questions in addition to knowing what materials are available for them to use and what else they might need.

CC: Now this does not mean that the teacher does not introduce new materials along the way?

KS: They always need new things too. But now both the students and teachers have an idea of what other materials or resources are needed for the inquiry.

CC: How do the students share the way they have learned? Do they share with one another as a class at the end? Does the whole class come up with bigger understandings than what they started out with?

Through Sharing, Students Make Connections and Learn

KS: The sharing process is an important process of learning. I can relate it to a graduate course or with my own work, where I'm exploring a topic and I'm pulling in all kinds of research. When I'm doing research, I'm often not sure that I've learned anything. I have all these little pieces everywhere, and it's not until I have to pull it together for an article or presentation that I've figured out what I've learned. Kids are the same way. The presentation is where they figure out what they know and what they don't know. So I think some kind of presentation is essential to the process of learning and doing inquiry.

Now, one of the things that I've found out with kids, I found out with literature circles. Initially when I worked with literature circles and I wanted the kids to do a presentation, they often did really tacky, cute projects that had no depth to them and didn't have anything to do with the discussion. So, I was ready to give up on the presentational projects completely because it just looked to me like it took them away from anything productive. Then, I realized what the problem was - they went right into thinking about what they wanted to do, and not about the information they wanted to communicate.

What I say to them is to get into their groups, and to think about not what do I want to present, but what is so important, so compelling, that I think everybody else in this room needs to know about it. The kids sit down and web this out. As you can imagine this step is a powerful process for them. Then, once they have webbed that out, the second thing we ask them to do is to think about how could you present it? Now, my experience is that in most classrooms there is something that is really hot at the moment. What I mean by that is it may be skits, everybody is into skits, or everybody is into dioramas. And the kids will generally put this down first, without regard to what they want to communicate to others. So, what is important is the brainstorming, so they write down an idea, and you say fine that's great now what else.

It is very important at this time for teachers to keep pushing the students so that they have a whole list of different ways that they think that they might be able to present it. Then what teacher can then do is ask the students to go back and look at the match between ideas and presentations. In other words, here are the compelling ideas that you want everybody to know, here is your list of ways that you might present it. Which one of these ideas is going to help you get across the important ideas you want to communicate to others. Generally what happens is that the students end up combining some of their presentation ideas.

While actually planning the presentation -the thinking of the presentation- is where I have often seen the most in-depth dialogue occur, because this step entails selecting out what they most want to present, and thinking this through takes their conversation much deeper and then what they present becomes much more powerful.

After the students have presented, it is then very important for the class to spend reflecting time. That is pulling back and asking kids to reflect through writing sketching, and webbing individually as well as going back to the class and to discuss what we learned. We need to help students ask the question: What out of all these things we learned are we going to carry away from this experience? What did we learn in terms of content? What did we learn in terms of process?

Every inquiry involves doing something different - it might be something that you learned about interviewing or about note taking, or you learned about how to read informational books. There is something that you learned in terms of the process of learning. So we take the time to reflect about the process as well as what we learned in terms of the content.

Another important aspect is to help students think about, what difference does this make in my life? We just did this whole thing on the environment, we learned all these things about the environment, what action are you going to take now? What are you going to do with this information so that it doesn't just remain school knowledge, but becomes part of the action knowledge that we use to live in the world.

Often the end of one inquiry project becomes fodder for the next inquiry, in terms of new questions and in terms of new actions in our lives.

For the most part, I think that what we have done in schools, even though it is powerful and interesting, has had a tendency to stop short of actually taking meaningful actions in our own community lives and the world. Or, if we did take action it was real superficial - such as going out and picking up trash on the playground for one afternoon. While important and nice, that is not really taking much action, that is not really re-thinking your way of living in the world. We need to help students ask: What does this information mean in terms of what I want to do differently in this school and in my home? That's the kind of thinking that I think needs to come off of inquiry; it is part of getting back to the bigger idea.

CC: How does this fit with our standards? Are standards driving our way of working at school? I mean, we've got national standards, we've got state standards, we've got local standards - standards, standards, standards everywhere.

Standards, The Curriculum, and Inquiry Need NOT Be At Odds -The DANGER Is Thinking of Standards As Merely Something to Transmit

KS: I see the standards as an important knowledge base for teachers. They let teachers know what others in the field value, and I think that is important knowledge for us to have. It is important for us to know what other people think.

The danger is that the standards are too often merely seen as something that must be transmitted to students. If you have a real understanding of those standards, what you can do as a teacher is find ways to bring them into the inquiry that is going on in the classroom without having to impose learning in a lock-

step, sequential way on the kids. So, what I'm arguing is that the teacher is a professional decision-maker who sees standards as part of her knowledge base, but doesn't take the standards as a top-down model of, "I must now transmit these standards in some 'exact' form to kids."

So, I'm not ignoring standards, but I'm also not putting standards in the hierarchy above me, as something that has been transmitted to me so now I must transmit them to kids. While I don't reject the notion of standards, I do reject this use of standards. Medical doctors need to know all of the current information that has come out through studies but when the medical doctor is diagnosing a patient a complexity of factors are usually going on. It's not as straightforward as matching the patient to a study result. The doctor makes a professional judgment based on medical research and on that particular patient's symptoms and history. Teachers need to be able to do the same thing. Teachers need to be informed so that they can make important decisions. They need to think about the following: I know that this is what the professional tells me, I know this well, I have to be highly educated to know this, but I also have to know this particular group of students and bring those two together.

CC: I cannot agree with you more.

KS: As a professional the teacher must use his or her knowledge base and bring all of these mandates, these standards, as well as the students' interests, knowledge and understandings to negotiate the curriculum and student learning. It doesn't let either teachers or students out of the process, because if they are let out of the process, then teachers are always in a position of having to motivate them because what we are doing doesn't pull from their own internal motivation. So, it is a lose-lose situation because there is so little connection with them.

CC: Do you think it is important for a teacher to structure learning?

Classroom Structures Depend on Classroom Contexts, which Vary Immensely from One Situation to the Next.

KS: Of course, it is a matter of how much and when. Teachers have to have an understanding about the reading process, about the writing process, and about mathematics, and the other curricular areas. Students must learn how to do these things, but learning how to read, write, do math, and so on happens in focused lessons. Learning these kinds of things is not going to happen naturally just because kids are immersed in inquiry.

But what I am arguing is that because the students are engaged in these inquires, they feel the need for the reading strategies, they feel the need for specific understandings about reading, writing, and math that we want to teach them. They have a need to learn about language and they want to learn about math. So, if we take away the inquiry, students don't have a reason to learn how to read, write, do math, hypothesize and so on, because it is not useful to them in some way. I'm arguing that the inquiry provides the context for learning these subjects. I'm also seeing that by keeping in place things like independent reading where the kids can choose from any book, or keeping in place a writing workshop time where kids are choosing from a wide range of topics to write about, it provides space in the classroom for kids to engage in their personal inquiry. A lot of what I'm talking about is a class inquiry focus, but the students' own questions are an important part of the mix. Providing a writing workshop time, a sustained reading time, gives kids a chance to pursue their own parallel, personal inquiries. They read and write about topics that are personally compelling that the class may never study.

CC: If a teacher wanted to structure her curriculum around the notion of inquiry, what might be some suggestions or encouraging words, or some readings that you would suggest that the teacher might take on?

KS: Some sources to read about inquiry are: *Learning Together Through Inquiry* by Kathy Short, Jean Schroeder, Julie Laird, Gloria Kauffman, Margaret Ferguson and Kathleen Crawford (Stenhouse 1996). *Creating Classroom for Authors and Inquirers* by Kathy Short and Jerome Harst with Carolyn Burke (Heinemann 1996) and *Inquiry at the Window* by Phyllis and David Whitin (Heinemann 1998).

One suggestion is to take a unit that you have always taught year after year and transform it into an inquiry unit. This is a good idea because teachers are familiar with it already, they know it, they have a lot of materials. Then start out by simply thinking: How can I encourage children to story about this topic? Spend a couple of days storying, then put out all of your unit materials, all of your books, all of your activities and have the kids explore it. See what their questions are. Then go from there.

Other teachers have started with the mandated curriculum and stayed with the mandated curriculum as the main topic. But what these teachers have done is transformed the mandated curriculum into an inquiry project. Some people have a sense that it is only inquiry if it is completely student selected topics. I've seen some teachers do powerful things using the school mandated topics as the broad structure, but within that using an inquiry approach. Does that make sense?

CC: Absolutely. This is how I had to teach in my last classroom where I had students in grades three through six.

The other question I was going to ask really bothers me about school and about education is that sometimes teachers get the message that *this is the way they ought to do it*. I really hate it when teachers get that message; I don't think it empowers them at all. I think it really makes them slaves, and my whole goal in life is not to enslave teachers to fit into this little box, to tell them that they should follow this "quick-fix program." You are not suggesting that they do this, are you?

Be WARY of the Proliferation of "Quick-Fix" Programs-Learning IS Contextual and Fluid

KS: I hope not. One of the things that I see that has been very powerful for me about inquiry is that it is a philosophical approach, a way of thinking about teaching and learning.

But how it is realized in the classroom is dramatically different from teacher to teacher and room to room. For example, for some people inquiry has been individual expert projects, and they organized their entire year around a curriculum of students engaging in these individual projects without having a class focus.

Others start with a broad concept and out of that create a web of issues and topics and questions, then that becomes the curriculum for the year. There are group projects and individual projects.

Still other teachers take the mandated curriculum and that becomes the overall structure. They don't necessarily know the order, but they know the topics that they are going to do for the year. Within those topics, they organize around an inquiry curriculum cycle.

Sometimes inquiry is a major project. Other times inquiry lasts two days. So, there are all of these different ways to go about engaging students in inquiry. In fact, if somebody would say to me here are the steps and the procedures to go through, I would know immediately that it wasn't inquiry, because inquiry is something that is negotiated in the classroom context and it is fluid. It is based on a philosophy that says we need to look at how we really go about learning and use the learning process as the basis of planning the curriculum.

Shirley Brice Heath has done research about youth organizations that are so compelling to teenagers outside of school that they have some kind of project or work which takes over their lives. And these are the very same kids that are rejecting school and are the problem-makers in school. If schools were a place where they could engage in work that is compelling for them, that is what I think inquiry is all about.

There is a definite philosophy to inquiry, but it looks very different in different rooms. That to me is what it should be, not all classrooms looking alike for teachers, the environment, the students - the learning contexts are different. Inquiry is more than curriculum; it's a way to approach the work as a lifelong learner who is constantly searching out questions to pursue. For inquiry to work in the classroom, teachers have to be inquirers in their professiona1lives and so there can never be one "correct" way to do an inquiry curriculum.